



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,021	06/28/2005	Jean-Francois Argillier	612.44660X00	1514
20457	7590	09/03/2008	EXAMINER	
ANTONELLI, TERRY, STOUT & KRAUS, LLP			BOYER, RANDY	
1300 NORTH SEVENTEENTH STREET				
SUITE 1800			ART UNIT	PAPER NUMBER
ARLINGTON, VA 22209-3873			1797	
			MAIL DATE	DELIVERY MODE
			09/03/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/522,021	ARGILLIER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	RANDY BOYER	1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 21 January 2005.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-13 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____ .                                    |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>21 January 2005</u> .   | 6) <input type="checkbox"/> Other: _____ .                        |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 1 and 13 are objected to for lack of antecedent basis.
2. With respect to claim 1, the claim recites the limitation “the colloidal elements.” There is insufficient antecedent basis for this limitation in the claim.
3. With respect to claim 13, the claim recites the limitation “the precipitated asphaltenes.” There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
5. Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
6. With respect to claim 13, the claim recites wherein “the precipitated asphaltenes” are “added.” However, neither claims 1 nor 4 (from which claim 13 depends) clearly specify any “adding” step for precipitated asphaltenes. Moreover, it is not clear what the precipitated asphaltenes are being added to. Such being the case, Examiner finds Applicant’s claim 13 indefinite under 35 U.S.C. 112, second paragraph.

***Claim Rejections - 35 USC § 102 / 35 USC § 103***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office Action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office Action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 1-13 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Krasuk (US 4,572,781).

11. With respect to claims 1 and 4, Krasuk discloses a method of transporting viscous petroleum effluent in pipes, characterized in that the following stages are

carried out: (a) separating the effluent into at least a solid phase consisting of particles coming from the colloidal elements (e.g., asphaltenes) that act on the viscosity of the effluent and into a fluidized liquid phase (see Krasuk, column 7, lines 35-46); (b) keeping an amount of particles dispersed in the fluidized liquid phase so as to obtain a suspension (see Krasuk, column 8, lines 9-13); and (c) circulating the suspension in the pipe (see Krasuk, column 8, lines 4-18; and Figs. 1 and 2 with accompanying text).

12. With respect to claim 2, Krasuk discloses wherein the separation is carried out by the addition of an amount of n-alkane such as pentane (see Krasuk, column 7, lines 35-42; and column 9, lines 61-67).

13. With respect to claim 3, Krasuk discloses wherein the particles are removed from the fluidized liquid phase (see Krasuk, column 7, lines 46-54).

14. With respect to claim 5, Krasuk discloses wherein the particles are dispersed through mechanical mixing (see Krasuk, column 8, lines 50-60).

15. With respect to claims 6 and 7, Krasuk discloses wherein the temperature of the suspension is kept below 40°C (see Krasuk, column 9, lines 51-53).

16. With respect to claims 8 and 10, Krasuk discloses wherein the particles may be encapsulated, e.g. with a surfactant additive (see Krasuk, column 12, lines 20-25).

17. With respect to claims 9 and 10, Krasuk discloses wherein the particles may be chemically modified (e.g., using a pH modifier additive) (see Krasuk, column 12, lines 26-45).

Art Unit: 1797

18. With respect to claims 11 and 12, Krasuk discloses wherein a predetermined amount of diluent for the liquid phase is added, and wherein a diluent that is badly-solubilizing for the particles is selected (see Krasuk, column 9, lines 40-53).

19. With respect to claim 13, Krasuk discloses wherein precipitated asphaltenes exist in a proportion ranging between 1 and 30 % by mass (see Krasuk, column 10, lines 19-22; column 12, lines 13-25; and Table 2).

***Conclusion***

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Randy Boyer whose telephone number is (571) 272-7113. The examiner can normally be reached Monday through Friday from 10:00 A.M. to 7:00 P.M. (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn A. Caldarola, can be reached at (571) 272-1444. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RPB

/Glenn A Calderola/

Acting SPE of Art Unit 1797